

| Annual Performance Targets | | |
|---|---|---|
| Activity | FY 2007 Targets | FY 2008 Targets |
| High Temperature Superconductivity | Complete six months operation of superconducting cable operating on the grid at greater than 10 kilovolts | Demonstrate prototype 50,000 A-m critical current-length for second generation wire |
| Visualization and Control | Develop a plan for the transfer of leadership from DOE to the Electric Reliability Organization (ERO) for the deployment of a synchronized measurement network in North America, and release the Real Time Dynamic Monitoring System (RTDMS) prototype visualization tool to industry for comment and recommendations | Install 50 sensors (PMU) as part of developing a smart real-time switchable network |
| Energy Storage Power and Electronics | Commission two major pioneering energy storage systems in collaboration with the CEC and NYSERDA, and complete data collection and monitoring of three systems commissioned during FY06 | Test three ionic liquids for possible use as electrolytes in batteries or electrochemical capacitors with the potential for doubling the energy and increasing the power by at least 50% for capacitors or doubling the lifetime and improving safety of rechargeable nonaqueous batteries |
| Renewable and Distributed Systems Integration | Develop second packaged CHP system which operates at 70+% efficiency | Award contracts to demonstrate improvement in grid utilization of 5% by 2009 and 20% by 2015 |
| | Maintain total Research and Development Program Direction costs in relation to total Research and Development costs of less than 12% | Maintain total R&D administrative overhead costs in relation to total R&D program costs of less than 12 percent. Baseline for administrative overhead rate currently being validated |
| Permitting, Siting and Analysis | | Finalize procedural rules and begin full implementation of DOE's new responsibility as lead agency for coordinating all applicable Federal authorization and related environmental reviews for transmission facilities |
| | | Support OE initiatives regarding measures to meet the electricity needs of the Nation over the next decade by publishing at least one study and holding at least one public meeting |
| | | Begin public process, including consultation with affected States, to develop improved metrics and methods for measuring transmission congestion in preparation for drafting the Second National Electricity Congestion Study, due August 2009. |
| | | Begin an interagency project team, to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution on Federal lands in eastern States, Hawaii, and Alaska |
| | | Prepare interagency review of draft NOPR on revisions to the DOE's export authorization and presidential permit programs, with at least two public meetings |
| | | Provide best-practice based technical assistance to 5 states and regions on state-level electricity policies, such as demand response, energy efficiency, renewable energy, regional planning/coordination, transmission siting, and distributed generation |
| | | Publish a draft PEIS after public meetings and review of comments for an interagency project team, to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution on Federal lands in eastern States, Hawaii, and Alaska |
| | | Publish a final Programmatic Environmental Impact Statement with an interagency team (Energy Policy Act of 2005, section 368) to designate corridors for oil, gas, and hydrogen pipelines and electricity transmission and distribution on Federal land in the eleven contiguous western States |
| Infrastructure, Security and Energy Restoration | | |